

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015594**Date Inspected:** 11-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

Subassembly, Bay 04, Deck Panel 13CE-DP3106B-001.

This QA inspector performed conventional Ultrasonic Testing (UT) Inspection on deck panel tack weld areas. The inspection is preliminary prior to using the phased array (PAUT) testing system to verify indications found with conventional Ultrasonic testing. QA inspector performed UT on deck panel DP3106B-001, 09 ribs, 18 welds, 138 total tack welds inspected.

Weld 1 scanned 9 locations with no indication.

Weld 2 scanned 9 locations with no indications.

Weld 3 scanned 9 locations with 1 indications.

Weld 4 scanned 9 locations with 1 indication.

Weld 5 scanned 9 locations with 1 indications.

Weld 6 scanned 9 locations with no indications.

Weld 138 scanned 9 locations with 2 indication.

Weld 139 scanned 9 locations with 1 indications.

Weld 173 scanned 9 locations with 3 indications.

Weld 174 scanned 9 locations with 1 indication.

Weld 140 scanned 9 locations with 1 indications.

Weld 141 scanned 9 locations with no indications.

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Weld 176 scanned 5 locations with no indications.  
Weld 177 scanned 5 locations with 1 indications.  
Weld 178 scanned 5 locations with 1 indications.  
Weld 180 scanned 5 locations with no indications.  
Weld 179 scanned 5 locations with no indications.  
Weld 181 scanned 5 locations with no indications.

Subassembly, Bay 04, Deck Panel 13AW-DP3125-001.

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled “Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld” after ZPMC welding personnel performed Second time weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panel examined is as follows:

DP3125-001: 3 tack weld location found compliant and 1 tack weld location found non-compliant.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Subassembly, Bay 09, Gantry# 2, 13CE, Deck Plate to U-rib.

This QA inspector informed ZPMC QC “Duan Ya Bing” about cracked tack weld (Time: 0930). ZPMC NDT personnel Completed MT on all similar locations. (Time: 1045). ZPMC Started production (Time: 1400 ).

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Juvekar,Amit	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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